

19 inch rack mount type Custom Computers Solution-ePC series SR4100 Series



* Specifications, color and design of the products are subject to change without notice.

Features

Compatible with Intel® Core™ processor series

Available with a power-saving, high-performance 10th-generation Core processor for advanced computation and drawing performance while minimizing power consumption.

19-inch rack-mountable housing

The product dimensions are [430mm(W)×465mm(D)×174.8mm(H)] and designed to be mounted in a 19 inch rack.

CPU and chipset designed for embedded devices

The adoption of embedded CPUs and chipsets makes it possible to ensure supply stability.

Expandable up to 11 slots of PCI and PCI Express

With the SR4100 series, take advantage of one PCI Express (x16) (x8 signal) expansion slot, one PCI Express (x8) (x8 signal) expansion slot, and nine PCI expansion slots.

With the SR4110 series, take advantage of one PCI Express (x16) (x8 signal) expansion slot, two PCI Express (x8) (x4 signal) expansion slots, and eight PCI Express (x4) (x1 signal) expansion slots.

With the SR4120 series, take advantage of one PCI Express (x16) (x8 signal) expansion slot, two PCI Express (x8) (x4 signal) expansion slots, four PCI Express (x4) (x1 signal) expansion slots, and four PCI expansion slots.

Rich variety of interfaces for freely expandable peripherals

SR4100 series has a variety of extended interface such as DVI-I x 1, 2.5GBASE-T x 1, 1000BASE-T x 1, USB 3.2 Gen1 (USB 3.0) x 6, serial (RS-232C) x 2 (Max.), serial (RS-232C/RS-422A/RS-485) x 2 (Max.).

Reliable, Japan-made power supply

The power supply, an essential component of the product, is made in Japan for superior reliability and system performance.

Adapted an industrial single board computer

An industrial single board computer is used to achieve high reliability as well as long-term product life. Furthermore, a RAID function (selectable from hardware mirroring or software mirroring) is also equipped and these features ensure a longer service life.

This product is a 19-inch rack-mount industrial-use PC that supports the 10th (Comet Lake-S) of Intel® Core™ series and contains the Q470 chipset.

In addition to a wide range of interfaces, the SR4100 series also includes PCI bus expansion slots and PCI Express bus expansion slot.

The product adopts a highly reliable Japan-made power supply (mfd. by Nipron).

Solution-ePC is an industrial-use computer that offers BTO (Build to Order) specifications to suit the requests of customers.

Only carefully selected components offering high reliability and stable supply are used, making the product suitable for industrial use.

Various selections are available to meet customer requests, including OS, CPU, memory, and storage options.

* The contents in this document are subject to change without notice.

* Visit the CONTEC website to check the latest details in the document.

* The information in the data sheets is as of July, 2025.

Specifications

Function specification < 1 / 2 >

Item	Description			
	SR4100	SR4110		SR4120
CPU [Selection]	Intel® Celeron® Processor G5900E 3.2GHz	Intel® Core™ i5 Processor 10500E 3.1GHz	Intel® Core™ i7 Processor 10700E 2.9GHz	Intel® Core™ i9 Processor 10900E 2.8GHz
Chip set	Intel® Q470			
BIOS	BIOS (mfd. by AMI)			
Memory [Selection]	Max. 64GB, 288pin SO-DIMM Socket x4, PC4-25600(DDR4 3200) DDR4 SDRAM 8GB: 8GB DDR4 SO-DIMM 3200MHz x1 16GB: 8GB DDR4 SO-DIMM 3200MHz x2 32GB: 16GB DDR4 SO-DIMM 3200MHz x2 64GB: 16GB DDR4 SO-DIMM 3200MHz x4			
Graphic *1	DVI-I x 1			
Controller		Intel® HD Graphics 610	Intel® HD Graphics 630	
System resolution	Analog RGB	800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 768, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,920 x 1,080 (16,770,000 colors)		
	DVI-D	800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 768, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,920 x 1,080, 1,920 x 1,200 (16,770,000 colors)		
Storage [Selection]	5-inch bay x 2 SATA III 3.5-inch HDD 2TB (Max. 2pcs) SATA III 2.5-inch SSD 256GB 3D TLC or 512GB 3D TLC or 1TB 3D TLC (Max. 2pcs) Installed with a removable case 3.5-inch bay x3(Shadow/bay) SATA III 3.5-inch HDD 2TB (Max. 2pcs) SATA III 2.5-inch SSD 256GB 3D TLC or 512GB 3D TLC or 1TB 3D TLC (Max. 2pcs) Installed with a 2.5-inch to 3.5-inch to 5-inch conversion bracket			
Optical drive [Selection]	5-inch bay x 1 Super Multi drive			
Audio	None			
LAN	2 ports (RJ-45 connector) LAN-1: Intel I219-LM Controller, LAN-2: Intel I225-LM Controller 2.5GBASE-T (225-LM), 1000BASE-T/100BASE-TX/10BASE-T			

*1 If the display cable is connected after the PC turns on, Monitor may not be displayed.

Function specification < 2 / 2 >

Item	Description		
	SR4100	SR4110	SR4120
USB	A-Type connector Front : USB 3.2 Gen1 (USB 3.0) x 2 ports Rear : USB 3.2 Gen1 (USB 3.0) x 4 ports * Expansion slot region (2 ports/1 slot)		
Serial [Selection]	9pin D-SUB connector (male) *Expansion slot region (2 ports/1 slot) COM1/COM2 RS-232C Baud rate : 50 - 115,200bps		
Expansion slot	PCI bus x 9 slots Usable card dimension: Max 313.8(L) x 107(H) [mm] PCI Express(x16) bus x 1 slot (x8 signal), PCI Express(x8) bus x 1 slot (x8 signal) Usable card dimension: Max 312.0(L) x 111.15(H) [mm]	PCI Express(x16) bus x 1 slot (x8 signal), PCI Express(x8) bus x 2 slots (x4 signal), PCI Express(x4) bus x 8 slots (x1 signal) Usable card dimension: Max 312.0(L) x 111.15(H) [mm]	PCI bus x 4 slots Usable card dimension: Max 313.8(L) x 107(H) [mm] PCI Express(x16) bus x 1 slot (x8 signal), PCI Express(x8) bus x 2 slots (x4 signal), PCI Express(x4) bus x 4 slots (x1 signal) Usable card dimension: Max 312.0(L) x 111.15(H) [mm]
Security (TPM)	TCG TPM2.0		
Hardware monitoring	Monitoring CPU temperature, system temperature, power voltage		
RTC/CMOS	The real-time clock is accurate within ±3 minutes (at 25°C) per month, Lithium backup battery life : 7 years or more		
Power Management	Power management setup via BIOS		
Supportable OS [Selection]	None Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese/English/Chinese/Korean) Windows 11 IoT Enterprise LTSC 2024 (Japanese/English/Chinese/Korean)		
Power supply			
Rated input voltage	Voltage : 100 - 240VAC (50/60Hz)		
Range of input voltage	90 - 264VAC (50/60Hz)		
Power capacity	500W (Peak)		
Allowable momentary power outage time	20mS or less		
External device power supply capacity	Allowed external devices: USB 3.2 Gen1 (USB 3.0) devices, USB 2.0 devices, PCI bus cards, PCI Express bus cards Total for all external devices : 134W (Max) Power capacity by voltage : +5V : 53W (Max), +3.3V : 45W (Max) [+5V & +3.3V : 88W(Max)] +12V : 100W (Max), -12V : 4W (Max), +5VSB : 5W (Max)		
Physical dimensions (mm)	430(W)×465(D)×174.8(H) (No protrusions)		
Weight	About 18.0kg (Excluding attachment fittings)		

Installation Environment Requirements

Item		Description
Operating temperature		5 - 40°C
Storage temperature		-20 - +60°C
Humidity		20 - 80%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ± 2 kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3), Signal line / ± 1 kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Contact discharge / ± 4 kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ± 8 kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance	- HDD built-in type (when current is applied): 10 - 50Hz / 4.9m/s ² (0.5G), 25 min. each in x, y, and z directions (JIS C60068-2-6 compliant, IEC60068-2-6 compliant) * Excluding when the product is vertically placed or using the optical drive - HDD built-in type (when current is not applied) and other types : 10 - 57Hz / semi-amplitude : 0.075 mm, 57 - 150Hz / 9.8m/s ² (1G), 40 min. each in x, y, and z directions (JIS C60068-2-6 compliant, IEC60068-2-6 compliant) * Excluding when the product is vertically placed or using the optical drive
Impact resistance		98m/s ² (10G) / 11ms / half-sine shock for 3 times in x, y, and z directions (JIS C60068-2-27 compliant, IEC60068-2-27 compliant) * Excluding when the product is vertically placed or using the optical drive
Grounding		Class D grounding
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A Low Voltage Directive, RoHS Directive), UCKA

Product Lineup

Model	Expansion slot	Note
SR4100 Series	PCI Express(x16) bus x 1 (x8 signal) PCI Express(x8) bus x 1 (x8 signal) PCI bus x 9	-
SR4110 Series	PCI Express(x16) bus x 1 (x8 signal) PCI Express(x8) bus x 2 (x4 signal) PCI Express(x4) bus x 8 (x1 signal)	-
SR4120 Series	PCI Express(x16) bus x 1 (x8 signal) PCI Express(x8) bus x 2 (x4 signal) PCI Express(x4) bus x 4 (x1 signal) PCI bus x 4	-

Included Items

Product [SR4100 Series] ... 1
AC Power Cable (125VAC, 3p type) ... 1
DVI-Analog RGB Branch Cable ... 1
Slot Cover ... 3 *1
Countersunk Head Screw (#6-32UNCx4) ... 8 *1
Mouse ... 1 *2
Keyboard ... 1 *2
Front Bezel Key ... 2
Security Key ... 2 *2
Product Guide ... 1

*1 The number of included items varies depending on the selection.

*2 Configuration differs depending on the selection.

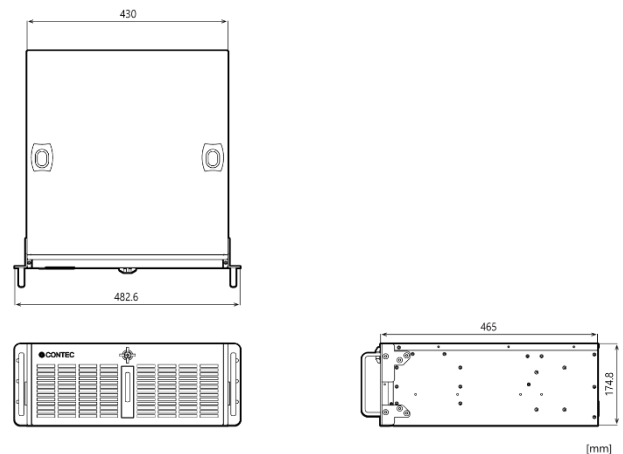
Supported OS

Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean)

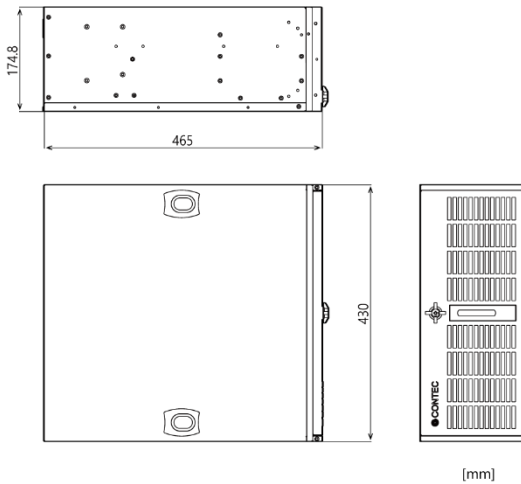
Windows 11 IoT Enterprise LTSC 2024 (Japanese / English / Chinese / Korean)

External Dimensions

Horizontally Placed

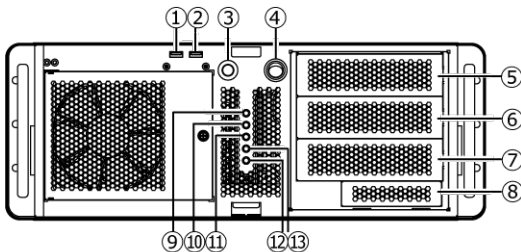


Vertically Placed

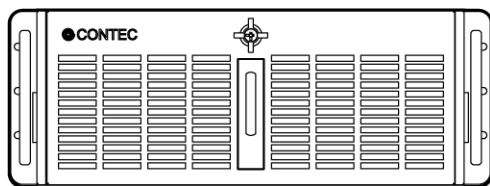


Component Name

Front View



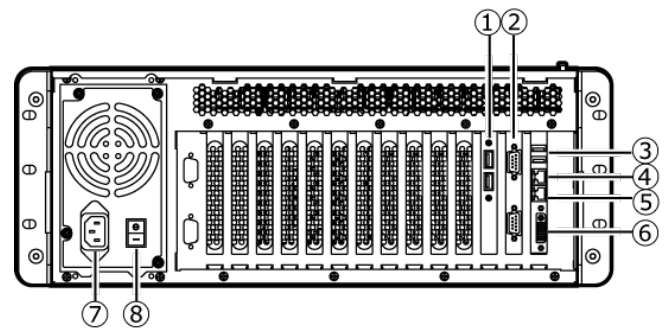
< With front bezel attached >



No.	Name	Function
1	USB 1	USB 3.2 Gen1 (USB 3.0) (Type-A connector)
2	USB 2	USB 3.2 Gen1 (USB 3.0) (Type-A connector)
3	RESET SW	Reset switch
4	POWER SW	Power switch
5	5-inch bay A	DVD : Slim Super Multi Drive
6	5-inch bay B	Storage (HDD, SSD) installed *1
7	5-inch bay C	Storage (HDD, SSD) installed *1
8	3.5-inch bay	Built-in hardware RAID mirror card *1
9	PWR LED	Power ON display LED
10	HDD LED	SATA device access display LED
11	LAN2 LED	LAN2 link LED
12	ALARM LED	Not used
13	LAN1 LED	LAN1 link LED

*1 These may not be installed depending on the product configuration.

Rear View



No.	Name	Function
1	USB 3/4	USB 3.2 Gen1 (USB 3.0) (Type-A connector) 2 ports
2	SERIAL 1/2	RS-232C (9pin D-SUB connector (male)) 2 ports COM1/COM2
3	USB 5/6	USB 3.2 Gen1 (USB 3.0) (Type-A connector) 2 ports
4	LAN 2	2500BASE-T/1000BASE-T/100BASE-TX/10BASE-T (RJ-45 connector) I225-LM: Ethernet2
5	LAN 1	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 connector) I219-LM: Ethernet
6	DVI-I	DVI-I 1 port
7	AC INLET	100 - 240VAC Power input connector
8	AC power SW	Main power switch

Expansion Slot Layout

The expansion slots of this product are allocated as follows.

No.	Expansion port pattern		
Model	SR4100	SR4110	SR4120
1	SBC	←	←
2	COM1/2	←	←
3	USB4/5	←	←
4	PCI Express(x16) (x8 signal)	PCI Express(x16) (x8 signal)	←
5	PCI Express(x8) (x8 signal)	PCI Express(x8) (x4 signal)	←
6		PCI Express(x8) (x4 signal)	←
7	PCI slot x 9	PCI Express(x4) (x1 signal) x 8	PCI Express(x4) (x1 signal) x 4
8			
9			
10			
11			PCI slot x 4
12			
13			
14			

Commodity Model

SR4100 series Type Rule

Model Name SR4100, SR4110, SR4120

Type Name SR41x0- N 5 1 2 0 1 0 2 5 0 0 0

No. 1 2 3 4 5 6 7 8 9 10 11 12

No.	Item	Type Name	Description
1	Power	N	500W mfd. by NIPRON
2	CPU	2	Core i5 10500E 3.1GHz
		3	Core i7 10700E 2.9GHz
		4	Core i9 10900E 2.8GHz
		5	Celeron G5900E 3.2GHz
3	Memory	1	DDR4 DIMM 8GB (8GB x 1)
		2	DDR4 DIMM 16GB (8GB x 2)
		3	DDR4 DIMM 32GB (16GB x 2)
		4	DDR4 DIMM 64GB (16GB x 4)
4	Storage 1 (3.5inch shadow bay)	0	None
		2	2TB 3.5inch HDD
		3	2TB 3.5inch HDD (Removable *1)
		A	256GB 2.5inch SSD (3D TLC)
		B	256GB 2.5inch SSD (3D TLC, Removable *1)
		D	512GB 2.5inch SSD (3D TLC)
		E	512GB 2.5inch SSD (3D TLC, Removable *1)
		F	1TB 2.5inch SSD (3D TLC)
5	Storage 2 (3.5inch shadow bay)	G	1TB 2.5inch SSD (3D TLC, Removable *1)
		0	None
		2	2TB 3.5inch HDD
		3	2TB 3.5inch HDD (Removable *1)
		A	256GB 2.5inch SSD (3D TLC)
		B	256GB 2.5inch SSD (3D TLC, Removable *1)
		D	512GB 2.5inch SSD (3D TLC)
		E	512GB 2.5inch SSD (3D TLC, Removable *1)
6	Optics system drive	F	1TB 2.5inch SSD (3D TLC)
		G	1TB 2.5inch SSD (3D TLC, Removable *1)
7	RAID	0	None
		H	Hardware RAID (Mirroring)
8	OS	0	None
		1	Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean)
		3	Windows 11 IoT Enterprise LTSC 2024 (Japanese/English/Chinese/Korean)
9	Mouse, Keyboard (option)	0	None
		1	Mouse (USB)
		2	Japanese Keyboard (USB)
		3	Mouse (USB), Japanese Keyboard (USB)
		4	English Keyboard (USB)
10	Expansion COM	5	Mouse (USB), English Keyboard (USB)
		0	None
11	Additional standards and additional AC cable	1	COM port x 2 (COM3/COM4)
		0	None
12	Kitting flag	0	None

*1 Use a 5-inch bay when selecting removable storage.